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| 09/402,294      | 10/01/1999  | JAMES EDWIN HAILEY   | RCA88752            | 5754             |

24498 7590 06/29/2005

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| EXAMINER |
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LONSBERRY, HUNTER B

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| ART UNIT | PAPER NUMBER |
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2611

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/402,294

**Applicant(s)**

HAILEY ET AL.

**Examiner**

Hunter B. Lonsberry

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/23/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Response to Arguments***

1. Applicant's arguments filed 1/14/04 have been fully considered but they are not persuasive.

1) Applicant argues that Schein does not disclose or suggest the need for the program map of Noguchi and Field as for the combination suggested by the examiner (response page 3).

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Schein is relied upon to teach a variable combination display of Internet and video data, both of which may be received over a single line from a CATV provider via a cable modem and CATV video connection. Noguchi is relied upon to teach the use of MPEG video, which offers

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a high quality picture and reduces the amount of bandwidth required for transmission of data. It would have been obvious to one skilled in the art at the time of invention to modify Schein to utilize the MPEG video decoders of Noguchi, in order to produce a high quality picture and take advantage of bandwidth savings. Field is relied upon to teach utilization a channel map and Internet/MPEG PIDs, by multiplexing video and Internet information together, thus simulating a bidirectional Internet transaction and reducing latency and response times for retrieving requested content. It would have been obvious to one skilled in the art at the time of invention to modify the combination of Schein and Noguchi to utilize the channel map and packet ids of Field, thus allowing video and data to be multiplexed together and reduce latency by providing the Internet data with the video program.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, and 4-7, 9-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 2002/0138840-A1 to Schein in view of U.S. Patent 6,426,779-B1 to Noguchi and U.S. Patent 6,018,764 to Field.

Regarding claim 1, Schein discloses a video decoder apparatus (figures 9/10) for decoding input video data encoded in a plurality of encoding formats, comprising:

A video output device (tuner 12, paragraph 34)

a processor 552 for decoding data encoded in an Internet compatible data format and providing a decoded video output (paragraphs 52-57, 60-67, TCP/IP data retrieved via a cable modem).

Schein inherently includes a display processor for formatting video and internet outputs for display as a composite video image wherein the proportion of said video image contributed by said first and second decoded outputs is variable as a percentage specified by an instruction, as Schein discloses different mixes of video and Internet data in figures 13 (13a shows 100% video), 15 (15c shows approximately 90% Internet and 10% video). Additionally, as Schein discloses that the PCTV device may utilize its own tuner (paragraph 34), and discloses a single input into the TV 520 from computer 510 in figure 8, Schein must include a display processor which mixes the inputs in variable amounts in response to a user instruction.

Schein inherently contains data identifiers in a channel map for associating the currently displayed program with Internet content as Schein discloses that a user watching a sports game may establish an Internet connection via the EPG to retrieve statistics and products associated with the current game (Page 8, paragraph 64).

Schein does not disclose the use of a processor for decoding MPEG compatible data, and identifiers for identifying MPEG or Internet content.

Noguchi discloses in Figure 3, a set top box 3 with MPEG video and audio decoders 25 and 26 and NTSC converter 27, EPG and MPEG data are sent together via satellite, the CPU retrieves the EPG data for display and the data is superimposed over the video image (column 4, line 27-column 7, line 32), thus enabling the display of high quality MPEG video and take advantage of additional bandwidth savings.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Schein to utilize the MPEG decoders of Noguchi, in order to enable the display of high quality MPEG video and take advantage of additional bandwidth savings.

The combination of Schein and Noguchi does not disclose the use of MPEG and Internet data identifiers.

Field discloses a TV broadcast system which utilizes packet ids and a program map to identify HTML data within an MPEG 2 video stream by reading the PIDs (column 5, line 3-column 6, line 53), thus allowing video and data to be multiplexed together and reduce latency by providing the Internet data with the video program.

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the combination of Schein and Noguchi to utilize the channel map and packet ids of Field, thus allowing video and data to be multiplexed together and reduce latency by providing the Internet data with the video program.

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Regarding claims 2 and 10, Field is relied upon to teach decoding data separating utilizing data identifiers from a single composite input data stream (column 5, lines 3-44).

Regarding claim 4, Schein discloses that an Internet data based EPG may display an index of television programs (page 7, paragraph 61). Field discloses a TV broadcast system, which utilizes packet ids and a program map to identify HTML data within an MPEG 2 video stream by reading the PIDs (column 5, line 3-column 6, line 53).

Regarding claim 5, Schein discloses that the Internet data may be encoded in TCP/IP (Page 8, paragraph 66).

Regarding claim 6, Schein discloses that the video data is variable between 0 and 100% (Figures 13A, B, 16A).

Regarding claim 7, Schein discloses a PCTV system, which integrates Internet data with television information. Schein inherently makes use of pixel memory to store an image prior to output, as memory is required to mix the two signals together prior to display.

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Regarding claims 9 and 18-19, Schein discloses a method for decoding image representative input video data encoded in a plurality of formats comprising the steps of::

Decoding video information in a first format (tuner 12, paragraph 34)

decoding data encoded in an Internet compatible data format and providing a decoded video output (paragraphs 52-57, 60-67, TCP/IP data retrieved via a cable modem).

Schein inherently formats video and internet outputs for display as a composite video image wherein the proportion of said video image contributed by said first and second decoded outputs is variable as a percentage specified by an instruction, as Schein discloses different mixes of video and Internet data in figures 13 (13a shows 100% video), 15 (15c shows approximately 90% Internet and 10% video) . Additionally, as Schein discloses that the PCTV device may utilize its own tuner (paragraph 34), and discloses a single input into the TV 520 from computer 510 in figure 8, Schein must include a display processor which mixes the inputs in variable amounts in response to a user instruction.

Schein inherently contains data identifiers in a channel map for associating the currently displayed program with Internet content as Schein discloses that a user watching a sports game may establish an Internet connection via the EPG to retrieve statistics and products associated with the current game (Page 8, paragraph 64).



Schein does not disclose the use of a processor for decoding MPEG compatible data, and identifiers for identifying MPEG or Internet content or the use of HTML formatted data, or an index of webpage information.

Noguchi discloses in Figure 3, a set top box 3 with MPEG video and audio decoders 25 and 26 and NTSC converter 27, EPG and MPEG data are sent together via satellite, the CPU retrieves the EPG data for display and the data is superimposed over the video image (column 4, line 27-column 7, line 32), thus enabling the display of high quality MPEG video and take advantage of additional bandwidth savings.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Schein to utilize the MPEG decoders of Noguchi, in order to enable the display of high quality MPEG video and take advantage of additional bandwidth savings.

The combination of Schein and Noguchi does not disclose the use of MPEG and Internet data identifiers or an index of webpage information.

Field discloses a TV broadcast system which utilizes packet ids and a program map to identify HTML data within an MPEG 2 video stream by reading the PIDs (column 5, line 3-column 6, line 53), web page information is stored in an index of webpage information (column 6, lines 40-48), thus allowing video and data to be multiplexed together and reduce latency by providing the Internet data with the video program.

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the combination of Schein and Noguchi to utilize the channel map

and packet ids of Field, thus allowing video and data to be multiplexed together and reduce latency by providing the Internet data with the video program.

Regarding claim 11 and 12, Schein discloses in Figures 14A-E, a VOD ordering system which requires a user to input a password or access code prior to order video or making a financial transaction, once the password/access code is accepted the video may be delivered (page 10, paragraph 85). The examiner takes official notice that the use of encryption to prevent a user from viewing material is well known in the art. Therefore, it would have been obvious to one skilled in the art at the time of invention to modify the combined system of Schein and Noguchi to include encryption to restrict unauthorized users from accessing products or services.

Regarding claims 13, 14, and 16, Schein discloses that a user watching a sports game may establish an Internet connection via the EPG to retrieve statistics and products associated with the current game, which are user selectable, the data may be encoded in HTTP or TCP/IP (Page 8, paragraph 64-66).

Regarding claim 15, Noguchi is relied upon to teach MPEG decompression (column 4, lines 57-67).

Regarding claims 17 and 20, Schein discloses in Figure 12B that the outputted video may transmit the video and Internet data as separate images within the composite video signal, and that the proportion of video and Internet data displayed is user selectable by pressing a button (page 8, paragraph 64).

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 2002/0138840-A1 to Schein in view of U.S. Patent 6,426,779-B1 to Noguchi U.S. Patent 6,018,764 to Field in further view of U.S. Patent 6,173,317 to Chaddha.

Regarding claim 3, the combined system of Schein, Noguchi and Field discloses a PCTV system, which supplements video data with Internet content.

The combined system of Schein, Field and Noguchi does not disclose that the Internet data is synchronized with the MPEG data.

Chaddha discloses in Figures 4-8, the use of an annotation stream which is synchronized with the video content and displayed simultaneously (column 7, line 15-column 8, line 45), thus enabling a user to learn more about the program they are watching by implementing it with related information, and not requiring additional user input to view the information.

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the combined system of Schein, Noguchi and field to include the synchronization between the video and data streams as taught by Chaddha, thus

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enabling a user to learn more about the program they are watching by implementing it with related information, and not requiring additional user input to view the information.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 2002/0138840-A1 to Schein in view of U.S. Patent 6,426,779-B1 to Noguchi and U.S. Patent 6,018,764 to Field in further view of U.S. Patent 6,240,555 to Shoff.

Regarding claim 8, Schein discloses in Figure 12B that the outputted video may transmit the video and Internet data as separate images within the composite video signal, and that the proportion of video and Internet data displayed is user selectable by pressing a button (page 8, paragraph 64).

The combination of Schein, Field and Noguchi does not disclose that the proportion of the composite image is based upon formatting received in the input video data.

Shoff discloses a system in which a video stream is synchronized with supplemental data, a display layout is also transmitted and may be automatically interpreted by a processor, which then reformats the display to include the video and supplemental content (Figure 8, column 9, lines 30-column 10, line 58), thus rendering the information in an optimized form as intended by the author for maximum viewability.

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the combination of Schein, Noguchi and Field to include the formatting instruction of Shoff in order to display the composite video image in an optimized viewing format as intended by the author.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hunter B. Lonsberry whose telephone number is 571-272-7298. The examiner can normally be reached on Monday-Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on 571-272-7294. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HBL



CHRIS GRANT  
PRIMARY EXAMINER